

Original

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

RECEIVED

MAR 15 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

RECEIVED

MAR 15 1996

RM-

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY
MM Docket No.

In re Petition of

Harbor Broadcasting, Inc.

For Upgrade to FM Channel 221C3
at Hermantown, MN

To: Allocations Branch
Policy and Rules Division
Mass Media Bureau

DOCKET FILE COPY ORIGINAL

PETITION FOR RULEMAKING

Harbor Broadcasting, Inc., (Petitioner), by its attorney, hereby submits its petition for rule making which proposes to amend §73.202 of the Commission's rules to upgrade Channel 221A at Hermantown, MN to Channel 221C3 at Hermantown, MN. In support whereof, the following is respectfully submitted:

1) Petitioner is the permittee of the construction permit bearing File No. BPH-950206MS. File No. BPH-950206MS authorizes the construction of an FM station on Channel 221A at Hermantown, MN.

2) The instant petition for rule making proposes to upgrade Channel 221A to Channel 221C3. The public interest would be served by adopting this rule amendment because Hermantown, MN would receive its first higher power FM allocation. Moreover, an upgraded station will provide greater coverage of the surrounding area and cause a substantial increase in the number of persons who will be able to listen to the Hermantown station.

No. of Copies rec'd
List A B C D E

014

MMB

3) As described more fully in the attached engineering statement, in order to accommodate the allocation of Channel 221C3 to Hermantown, Channel 221A at Ely, MN will be changed to Channel 233A and Channel 221A Pine City, MN will be changed to Channel 265A. Commission policy permits an upgrade at one location even if that upgrade necessitates two other allocation changes. If this Petition is granted, Petitioner acknowledges its responsibility to reimburse the affected stations for the reasonable costs incurred in changing frequencies and is committed to reimburse said costs.

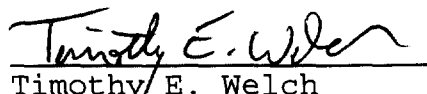
4) Petitioner proposes that the FM allocation table be amended as follows:

<u>Location</u>	<u>Current Allocation</u>	<u>Proposed Allocation</u>
Hermantown, MN	221A	221C3
Ely, MN	221A	233A
Pine City, MN	221A	265A

WHEREFORE, in view of the information presented herein, it is respectfully submitted that the public interest would be served by amending the FM allocation table as proposed herein.

Respectfully submitted,
HARBOR BROADCASTING, INC.

Hill & Welch
Suite #113
1330 New Hampshire Ave., N.W.
Washington, D.C. 20036
(202) 775-0070
March 15, 1996


Timothy E. Welch
Attorney

ENGINEERING STATEMENT IN
SUPPORT OF PETITION
FOR RULEMAKING
CHANNEL 221C3 - HERMANTOWN, MN

Harbor Broadcasting, Inc.
Hermantown, MN

February 6, 1996

Prepared for: Mr. Tom Lijewski
Harbor Broadcasting, Inc.
111 Marquette Avenue, South
#1501
Minneapolis, MN 55401

CARL E. SMITH CONSULTING ENGINEERS

CONTENTS

Title Page

Contents

Engineering Affidavit

Engineering Statement

1.0 General

2.0 Allocation Considerations

Table 2.0 - FM Allocation Study - Channel 221C3 (92.1 MHz) -
Hermantown, MN

Table 2.1 - FM Allocation Study - Channel 265A (100.9 MHz) -
Pine City, MN

Table 2.2 - FM Allocation Study - Channel 233A (94.5 MHz) -
Ely, MN

Fig. 2.0 - Predicted City Grade Contour
Channel 221C3 - Hermantown, MN

3.0 Area and Population

Fig. 3.0 - Present and Proposed
1 mV/m Contours

Table 3.0 - Present and Proposed
Area and Population

4.0 NCE-FM Preclusion

Fig. 4.0 - Proposed 60 dBu Contour
and KBJR-TV 47 dBu Contour

Fig. 4.1 - Preclusion Study
Channel 218A

Fig. 4.2 - Preclusion Study
Channel 218C3

Fig. 4.3 - Preclusion Study
Channel 218C2

CONTENTS

cont'd

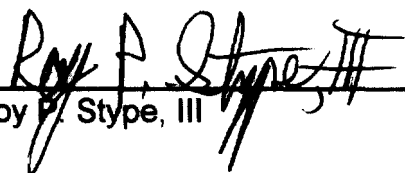
Fig.	4.4	- Preclusion study Channel 218C1
Fig.	4.5	- Preclusion Study Channel 218C
Fig.	4.6	- Preclusion Study Channel 219A
Fig.	4.7	- Preclusion Study Channel 219C3
Fig.	4.8	- Preclusion Study Channel 219C2
Fig.	4.9	- Preclusion Study Channel 219C1
Fig.	4.10	- Preclusion Study Channel 219C
Fig.	4.11	- Preclusion Study Channel 220A
Fig.	4.11(a)	- Expanded View of Channel 220A Preclusion Area
Fig.	4.12	- Preclusion Study Channel 220C3
Fig.	4.12(a)	- Expanded View of Channel 220C3 Preclusion Area
Fig.	4.13	- Preclusion Study Channel 220C2
Fig.	4.14	- Preclusion Study Channel 220C1
Fig.	4.15	- Preclusion Study Channel 220C

ENGINEERING AFFIDAVIT

State of Ohio)
) ss:
County of Summit)

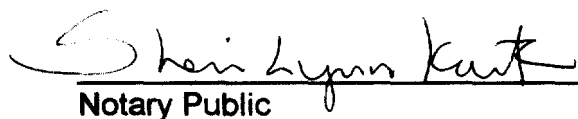
Roy P. Stype, III, being duly sworn, deposes and states that he is a graduate Electrical Engineer, a qualified and experienced Communications Consulting Engineer whose works are a matter of record with the Federal Communications Commission and that he is a member of the Firm of "Carl E. Smith Consulting Engineers" located at 2324 North Cleveland-Massillon Road in the Township of Bath, County of Summit, State of Ohio, and that the Firm has been retained by Harbor Broadcasting, Inc., to prepare the attached "Engineering Statement In Support Of Petition For Rulemaking - Channel 221C3 - Hermantown, MN."

The deponent states that the Exhibit was prepared by him or under his direction and is true of his own knowledge, except as to statements made on information and belief and as to such statements, he believes them to be true.



Roy P. Stype, III

Subscribed and sworn to before me on **February 6, 1996**.



Notary Public

/SEAL/

SHERI LYNN KURTZ, Notary Public
Residence - Summit County
State Wide Jurisdiction, Ohio
My Commission Expires June 14, 2000

ENGINEERING STATEMENT

1.0 GENERAL

This engineering statement is prepared on behalf Harbor Broadcasting, Inc., permittee of construction permit BPH-950206MS for a new FM station on Channel 221A in Hermantown, Minnesota. It supports a petition to amend the FM Table of Allotments to substitute Channel 221C3 for Channel 221A in Hermantown and upgrade this facility. The data contained in Section 2.0 of this exhibit shows that Channel 221C3 can be substituted for Channel 221A in Hermantown, provided that appropriate channel substitutions are made in Ely, Minnesota, and Pine City, Minnesota.

Since this proposal involves upgrading a Class A allotment on Channel 221 and the proposed 1 mV/m contour will overlap the Grade B contour of a TV station operating on Channel 6, detailed preclusion studies were conducted to evaluate the impact of this proposed upgrade on possible new noncommercial educational FM stations operating on the upper channels of the reserved band. The results of these studies are outlined in Section 4.0 of this exhibit. As shown by this data, the upgrade proposed herein will have no significant preclusive impact on noncommercial educational FM stations on Channels 218, 219, or 220.

2.0 ALLOCATION CONSIDERATIONS

The geographic reference coordinates for Hermantown are:

NL- 46° 49' 31"
WL- 92° 12' 32"

This places Hermantown within Zone II, as defined by Section 73.205(c) of the FCC Rules. Accordingly, as outlined in Section 73.210(a) of the FCC Rules, the allotment of a Class C3 channel to Hermantown is permitted. The studies contained in this exhibit were conducted from a site 5.7 kilometers west of these reference coordinates. The geographic coordinates of this site are:

NL- 46° 49' 30"
WL- 92° 17' 00"

This site also falls within Zone II, permitting the operation of a Class C3 facility from this site.

Table 2.0 is an FM allocation study for Channel 221C3 from the site described above. An examination of this table shows that operation on Channel 221C3 from this site would be short spaced to the authorized operation on Channel 221A in Hermantown, as well as two additional stations which require protection consideration:

WCMP-FM	Pine City, MN	Channel 221A
WELY-FM	Ely, MN	Channel 221A

The short spacing to the authorized operation on Channel 221A will not pose any problems since this authorized operation will be deleted if Channel 221C3 is substituted for Channel 221A in Hermantown, as proposed herein. Furthermore, under the provisions of Section 1.420(g) of the FCC Rules, this conflict with the authorized operation on Channel 221A will permit this construction permit to be modified to specify operation on Channel 221C3, regardless of other expressions of interest which might be received.

The short spacing to WCMP-FM can be eliminated by substituting another channel for Channel 221A in Pine City. Table 2.1 is an FM allocation study for Channel 265A which was conducted from the licensed transmitter site of WCMP-FM. As shown in this table, operation on channel 265A from this site will meet the spacing requirements to all other facilities requiring protection consideration. It should be noted that, under the rounding provisions of Section 73.208(c)(8) of the FCC Rules, the 94.67 kilometer spacing to KDWB-FM - Richfield, Minnesota, is considered to comply with the required spacing of 95 kilometers. Thus, Channel 265A can be substituted for Channel 221A in Pine City in order to eliminate this short spacing. This channel substitution will also permit fully spaced 6 kilowatt operation for WCMP-FM, which is not possible from this site on Channel 221A.

The short spacing to WELY-FM can be eliminated by substituting another channel for Channel 221A in Ely. Table 2.2 is an FM allocation study for Channel 233A which was conducted from the authorized transmitter site of WELY-FM. As shown in this table, operation on channel 233A from this site will meet the spacing requirements to all other facilities requiring protection consideration. Thus, Channel 233A can be substituted for Channel 221A in Ely in order to eliminate this short spacing.

Figure 2.0 is a map exhibit showing the predicted 3.16 mV/m (city grade) contour from the site specified above for Channel 221C3. This contour was projected assuming maximum Class C3 facilities of 25 kilowatts effective radiated power at 100 meters above average terrain utilizing terrain data from the NGDC 30 second terrain database. As shown in this figure, it will be possible to provide city grade service to all of Hermantown from this site on Channel 221C3.

In summary, Channel 221C3 can be substituted for Channel 221A in Hermantown, Minnesota, provided that Channel 265A is substituted for Channel 221A in Pine City, Minnesota, for use by WCMP-FM, and Channel 233A is substituted for Channel 221A in Ely, Minnesota, for use by WELY-FM.

TABLE 2.0

FM ALLOCATION STUDY - CHANNEL 221C3 (92.1 MHz) - HERMANTOWN, MN

HARBOR BROADCASTING, INC.
HERMANTOWN, MN

STUDY COORDINATES: 46/49/30 92/17/00

STATION	LOCATION	CHANNEL	CLASS	SPACING (km)	REQUIRED SPACING*	NOTES
KCFB	St. Cloud, MN	218	A	198.52	42.0	
KAXE	Grand Rapids, MN	219	C1	99.66	76.0	
ALLOTMENT	Atikokan, ON	220	A	217.08	113.0	11
BPH950206MS	Hermantown, MN	221	A	13.07	142.0	2, 10
WCMPFM	Pine City, MN	221	A	114.96	142.0	10
WELYFM	Ely, MN	221	A	123.05	142.0	2, 10
WYRQ	Little Falls, MN	221	A	182.93	142.0	
WMEQFM	Menomonie, WI	221	C3	217.00	153.0	
WRLSFM	Hayward, WI	222	A	107.32	89.0	
ALLOTMENT	Buhl, MN	223	C2	83.25	56.0	11
BPED950919MB	Buhl, MN	223	C2	83.74	56.0	7
951106MG	Neillsville, WI	224	A	279.95	42.0	7
KTIG	Pequot Lakes, MN	274	C2	163.84	17.0	1
BPH950203MB	Nashvauk, MN	275	C3	82.32	14.0	7
ALLOTMENT	Nashvauk, MN	275	C3	90.69	14.0	11
BPH950203MC	Nashvauk, MN	275	C3	91.46	14.0	7
BPH950201MB	Nashvauk, MN	275	C3	93.89	14.0	7

* Required Spacing Per Section 73.207 of The FCC Rules

Notes:

- | | |
|--------------------------------------|-------------------------|
| 1 - Applied For Under Section 73.215 | 7 - Pending Application |
| 2 - Construction Permit | 8 - Proposed Rulemaking |
| 3 - Channel Deletion Proposed | 9 - Rulemaking Petition |
| 4 - Move From This Channel Ordered | 10 - Short-Spaced |
| 5 - Move to This Channel Ordered | 11 - Vacant Allotment |
| 6 - One Step Reference Site | |

TABLE 2.1

FM ALLOCATION STUDY - CHANNEL 265A (100.9 MHz) - PINE CITY, MN

HARBOR BROADCASTING, INC.
HERMANTOWN, MN

STUDY COORDINATES: 45/54/07 92/57/25

STATION	LOCATION	CHANNEL	CLASS	SPACING (km)	REQUIRED SPACING*	NOTES
KSJRFM	Collegeville, MN	211	C1	131.02	22.0	
KFAI	Minneapolis, MN	212	A	105.95	10.0	
WBOBFM	Minneapolis, MN	262	C1	94.67	75.0	
WBOBFM	Minneapolis, MN	262	C1	102.05	75.0	2
WSCN	Cloquet, MN	263	C1	118.05	75.0	
WBIZFM	Eau Claire, WI	264	C1	169.29	133.0	
KIKVFM	Alexandria, MN	264	C1	171.24	133.0	
KOWZ	Blooming Prairie, MN	265	C1	208.97	200.0	1, 2
WHSFM	Hayward, WI	266	A	110.29	72.0	
KBHP	Bemidji, MN	266	C1	220.06	133.0	1
KDWBFM	Richfield, MN	267	C	94.67	95.0	
KTCFFM	Crosby, MN	268	C3	106.28	42.0	

* Required Spacing Per Section 73.207 of The FCC Rules

Notes:

- | | |
|--------------------------------------|-------------------------|
| 1 - Applied For Under Section 73.215 | 7 - Pending Application |
| 2 - Construction Permit | 8 - Proposed Rulemaking |
| 3 - Channel Deletion Proposed | 9 - Rulemaking Petition |
| 4 - Move From This Channel Ordered | 10 - Short-Spaced |
| 5 - Move to This Channel Ordered | 11 - Vacant Allotment |
| 6 - One Step Reference Site | |

TABLE 2.2

FM ALLOCATION STUDY - CHANNEL 233A (94.5 MHz) - ELY, MN

HARBOR BROADCASTING, INC.
HERMANTOWN, MN

STUDY COORDINATES: 47/53/40 91/51/50

STATION -----	LOCATION -----	CHANNEL -----	CLASS -----	SPACING (km) -----	REQUIRED SPACING* (km) -----	NOTES -----
WTRX	Hibbing, MN	230	C1	104.09	75.0	
BPED950713MC	Red Lake, MN	231	C1	237.31	75.0	7
KEZZ	AITKIN, MN	232	C3	187.66	89.0	2
CJSDFM	Thunder Bay, ON	232	C	216.04	195.0	
KSTPFM	St. Paul, MN	233	C	329.69	226.0	
KSKK	Staples, MN	234	C2	288.29	106.0	1
KQDSFM	Duluth, MN	235	C1	123.76	75.0	
KKDL	Detroit Lakes, MN	236	C1	356.91	75.0	
WAVC	Duluth, MN	286	C1	124.33	22.0	
ALLOTMENT	Thunder Bay, ON	287	C	203.86	40.0	11

* Required Spacing Per Section 73.207 of The FCC Rules

Notes:

- | | |
|--------------------------------------|-------------------------|
| 1 - Applied For Under Section 73.215 | 7 - Pending Application |
| 2 - Construction Permit | 8 - Proposed Rulemaking |
| 3 - Channel Deletion Proposed | 9 - Rulemaking Petition |
| 4 - Move From This Channel Ordered | 10 - Short-Spaced |
| 5 - Move to This Channel Ordered | 11 - Vacant Allotment |
| 6 - One Step Reference Site | |

3.0 AREA AND POPULATION

Figure 3.0 is a map exhibit showing the predicted 1 mV/m contour for the proposed operation on Channel 221C3 for operation with maximum Class C3 facilities from the coordinates outlined in Section 2.0 of this exhibit. This figure also shows the predicted 1 mV/m contour for the authorized facilities on Channel 221A. Table 3.0 presents detailed data on the present and proposed populations and areas, as well as the loss and gain areas. It should be noted that the entire area encompassed by these contours, including the loss and gain areas, is well served, receiving in excess of five fulltime aural services.

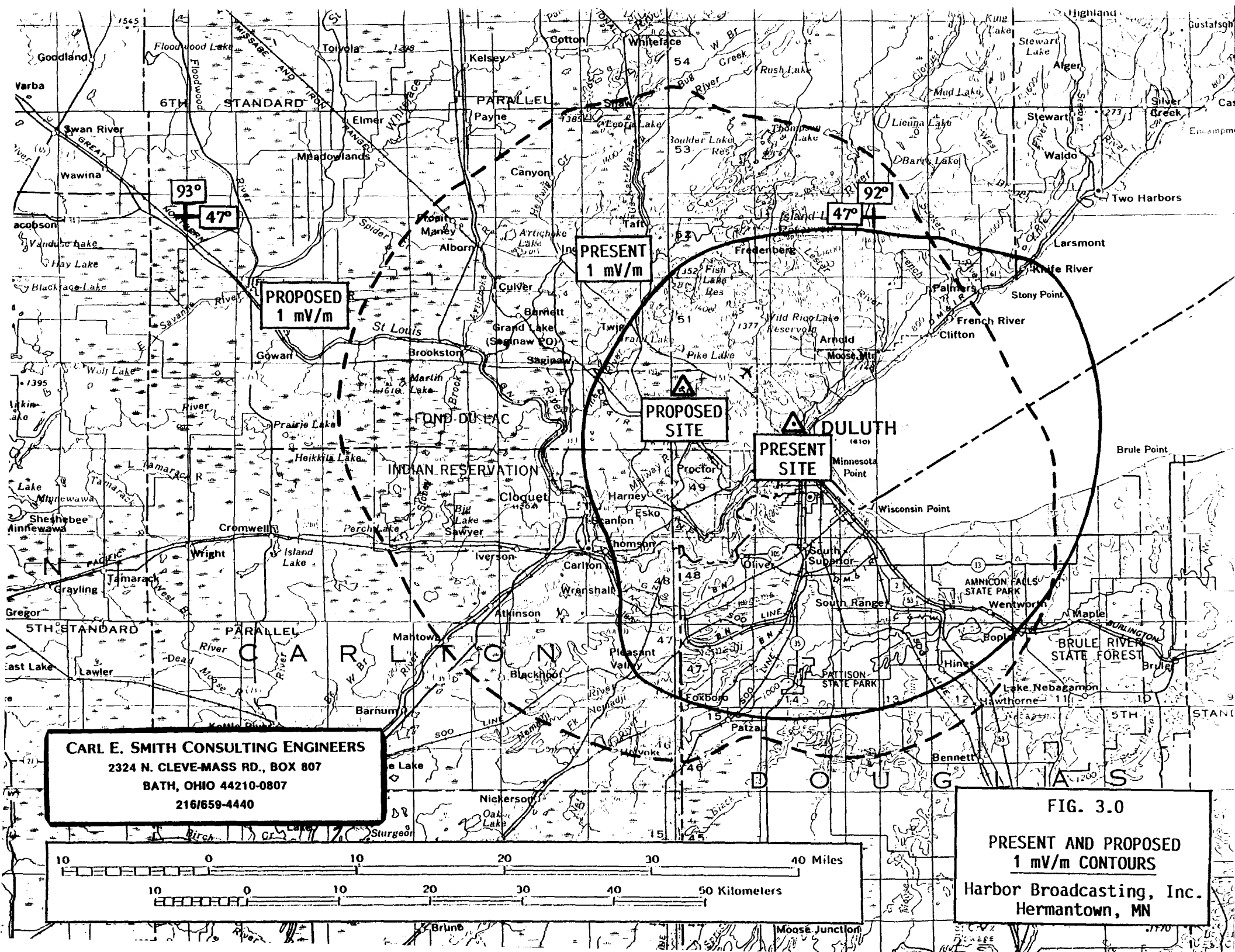


TABLE 3.0
PRESENT AND PROPOSED
AREA AND POPULATION
Harbor Broadcasting, Inc.
Hermantown, MN

	Area (<u>Square Kilometers</u>)	Population (<u>1990 Census</u>)
Present	1,905.6	145,954
Gain	2,270.0	25,014
Loss	58.0	621
Proposed	4,117.6	170,347
Net Gain	2,212.0	24,393

4.0 NCE-FM PRECLUSION

Note 2 of Section 1.420(g) of the FCC Rules requires that requests to upgrade a Class A allotment on Channel 221 provide a detailed analysis of the preclusive impact of the proposed upgrade on new noncommercial educational FM stations on Channels 218, 219, and 220, if the proposed 1 mV/m contour will overlap the Grade B contour of a TV station operating on Channel 6. The criteria to be employed in conducting these preclusion studies were outlined in the Notice Of Proposed Rulemaking in MM Docket 88-572 (Myrtle Beach, South Carolina).

Figure 4.0 is a map exhibit depicting the predicted 1 mV/m contour for the proposed upgraded operation on Channel 221C3 in relation to the predicted 47 dBu (Grade B) contour for KBJR-TV - Superior, Wisconsin, which operates on Channel 6. The proposed 1 mV/m contour was projected utilizing terrain data from the NGDC 30 second terrain database and assumes operation from the reference coordinates outlined in Section 2.0 of this exhibit with an effective radiated power of 25 kilowatts at 100 meters above average terrain. The KBJR-TV Grade B contour is based upon the notified operating facilities from the FCC's TV engineering database and terrain data from the NGDC 30 second terrain database. As shown in this figure, the proposed 1 mV/m contour is totally encompassed within the KBJR-TV 47 dBu contour. Thus, an examination of the preclusive impact of this upgrade proposal on new noncommercial educational FM stations on Channels 218, 219, and 220 is required.

For each class and channel of NCE-FM operation, the area of potential preclusion was considered to be the area within the required spacing, as outlined in Section 73.207 of the FCC Rules, between the proposed upgraded operation and the potential NCE-FM station but outside the required spacing between the authorized Channel

221A operation and the potential NCE-FM station. This potential preclusion area for each channel and class was then examined to evaluate the preclusive effects of other existing or authorized stations or allotments. With respect to other domestic facilities operating in the non-reserved band and all Canadian facilities, preclusion was based upon the spacing requirements to the potential NCE-FM facility, as outlined in Section 73.207 of the FCC Rules. For domestic facilities operating in the reserved band, maximum operating facilities for the class were assumed for the potential NCE-FM facility and the actual operating facilities were employed for the precluding station. Using these operating facilities and assuming uniform terrain, the required spacing to achieve compliance with the NCE-FM protection requirements outlined in Section 73.509 of the FCC Rules was determined. This value was considered to be the preclusion distance from the existing station under consideration.

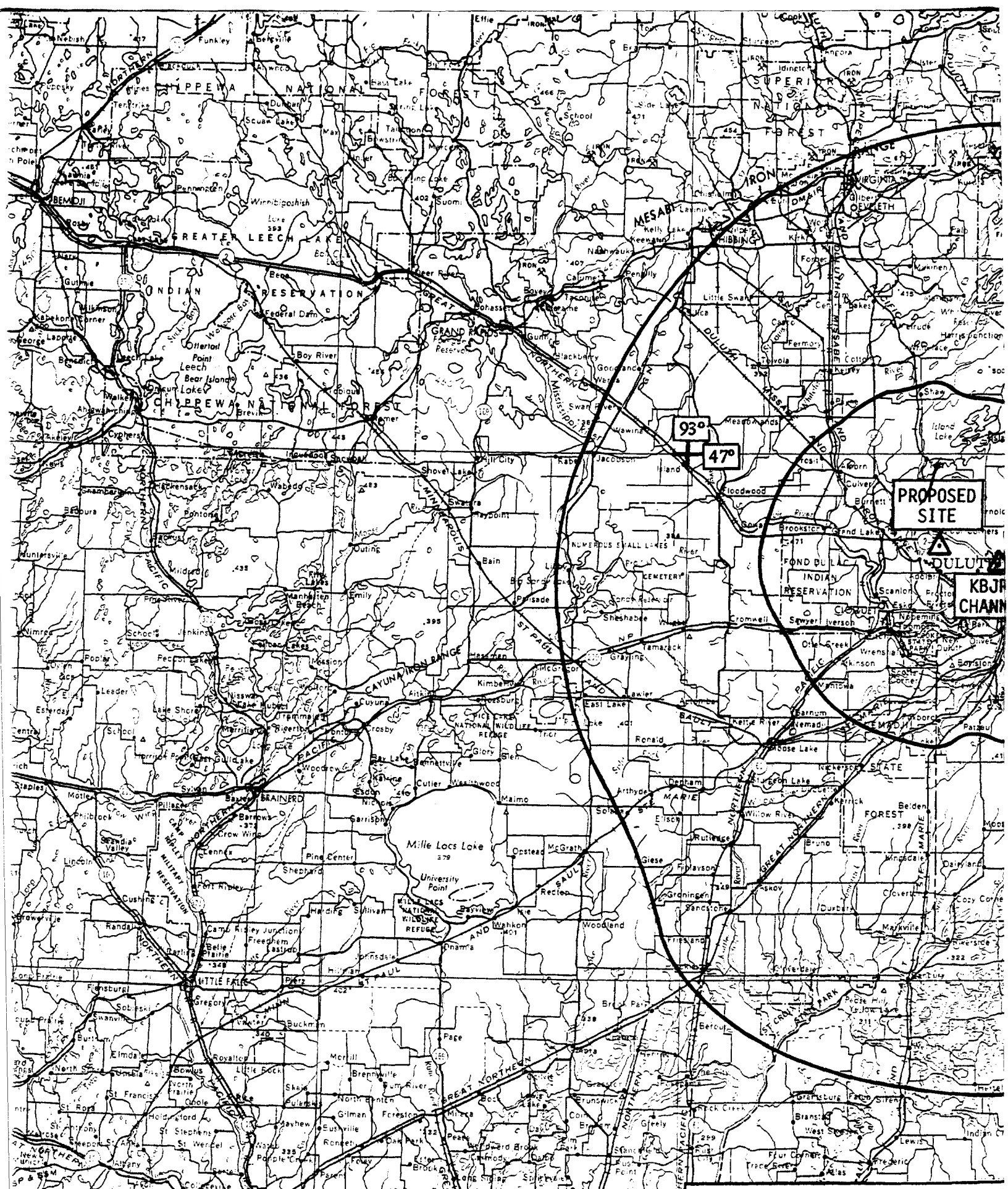
Figures 4.1 through 4.5 present the results of these preclusion studies for each of the five possible classes of operation on Channel 218. As shown in these figures, the proposed upgrade on Channel 221C3 will have no preclusive impact whatsoever on Channel 218, since the use of this channel is already precluded over the entire potential preclusion area by the existing operation of KUWS - Superior, Wisconsin, which operates on Channel 217C1. Similarly, Figures 4.6 through 4.10 depict the preclusion studies for each possible class on Channel 219. These figures show that there will also be no preclusion on Channel 219, again due to the existing operation of KUWS on Channel 217C1.

Figures 4.11 through 4.15 present the results of these preclusion studies for Channel 220. As shown in these figures, no preclusion will occur on Channel 220C2, Channel 220C1, or Channel 220C, since the entire area of potential preclusion is al-

ready precluded by other existing or authorized facilities. Small areas of preclusion will exist, however, for Channel 220A and Channel 220C3.

Figure 4.12(a) is a detailed map exhibit showing an expanded view of the preclusion area for Channel 220C3. As shown in this figure, this entire preclusion area falls over Lake Superior in an area where it is not possible to construct a new station. Thus, in reality, there is no preclusionary impact on Channel 220C3. Similarly, Figure 4.11(a) is a detailed map exhibit showing an expanded view of the preclusion area for Channel 220A. An examination of this figure, in conjunction with maps and data from the 1990 U.S. Census, shows that there are no communities with a population of 1000 or more located wholly or partially within this preclusion area. Thus, it is felt that the proposed upgrade will have no adverse impact on potential new NCE-FM stations on Channel 220A.

As shown by the above data, the proposed upgraded facilities on Channel 221C3 will not have an adverse preclusionary impact on new noncommercial educational FM stations in the upper portion of the reserved band. Furthermore, the adoption of this proposal will result in Channel 221A being deleted from both Pine City, Minnesota, and Ely, Minnesota, which will eliminate the preclusionary effect of these two allotments on the upper portion of the reserved band. Thus, the adoption of this proposal may actually increase the availability of spectrum for new noncommercial educational FM stations in this area.

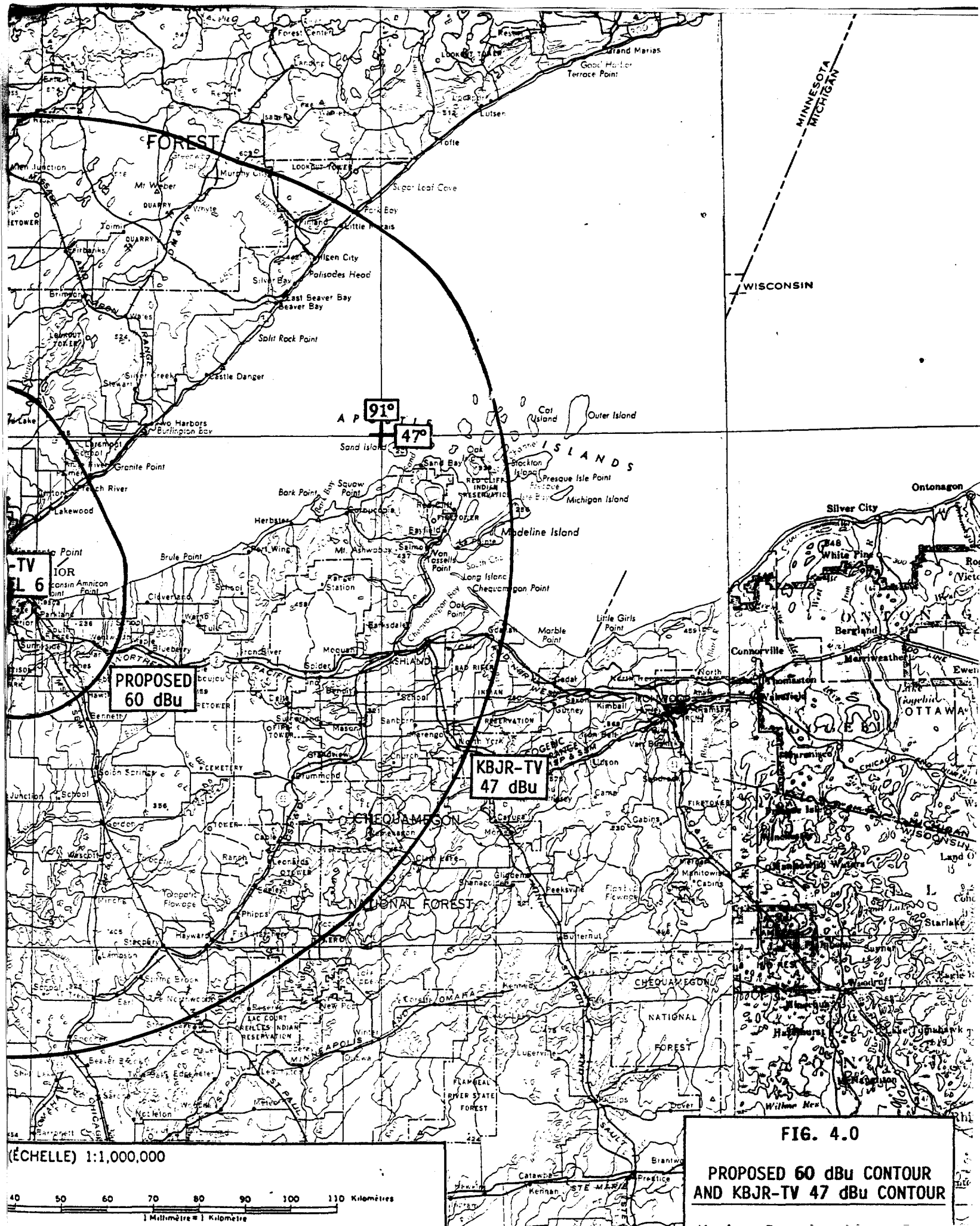


PROPOSED SITE

KBJR CHANNEL

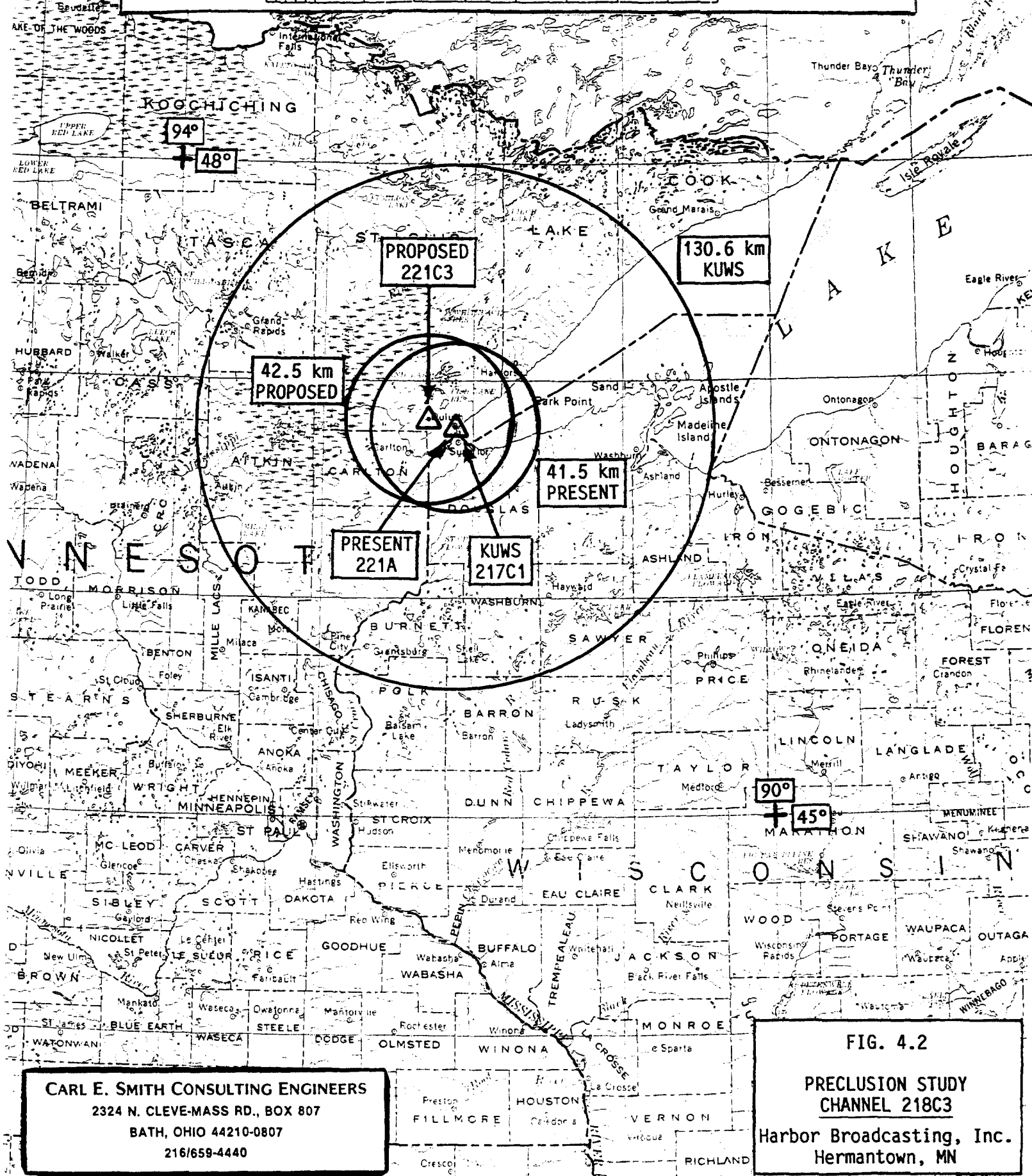
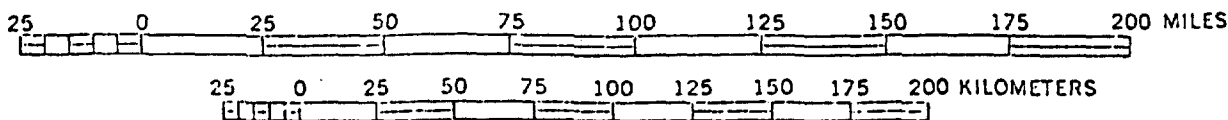
CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVELAND RD. BOX 807

Scale: Kilometers 10 5 0 10 20 30



SCALE 1:2,500,000

1 inch equals approximately 40 miles



CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
216/659-4440

FIG. 4.2

PRECLUSION STUDY
CHANNEL 218C3

Harbor Broadcasting, Inc.
Hermantown, MN